REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-18 and 20-25 are pending in the present application. Claim 19 has been canceled and claims 1, 5, 8, 10, 12, 16 and 20-23 have been amended by the present Amendment.

In the outstanding Office Action, claims 1-7, 10-15, 19 and 20 were rejected under 35 U.S.C. § 102(e) as anticipated by Jeong; and claims 8, 9, 16-18 and 21-25 were indicated as allowable if rewritten in independent form.

Applicant thanks the Examiner for the indication of allowable subject matter. In light of this indication, claims 21-23 have been rewritten in independent form and claim 20 has been amended to depend on claim 21, rather than on canceled claim 19.

Claims 1-7, 10-15, 19 and 20 stand reject under 35 U.S.C. § 102(e) as anticipated by Jeong. This rejection is respectfully traversed.

Amended independent claim 1 is directed to a linear compensation system including a linear compensation unit configured to vary a step size of an adaptive equalizer according to whether a signal-to-noise ratio (SNR) for an output signal of a power amplifier (PA) satisfies a prescribed standard, and output a selected linear compensation coefficient to the modulator. Further, the linear compensation unit computes error values by determining

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differences between output values of the adaptive equalizer and a reference signal, computes

an average error value of the computed error values, and variably varies the step size of the

adaptive equalizer until a current error value is less than a predetermined value of a previous

error value.   Independent claim 10 includes similar features in a varying scope.

In a non limiting example, Figure 3 illustrates the linear compensation unit computing

error values by determining differences between output values of the adaptive equalizer 24-1

(see Figure 2) and a reference signal, computing an average error value of the computed error

values, and variably varying the step size of the adaptive equalizer until a current error value

is less than a predetermined value of a previous error value (see steps S12-S16). These

features are also discussed in the specification in paragraphs [44] and [45] of the specification.

As noted in paragraph [46], steps S11 through S16 in Figure 3 are repeated until the current

average error value is less then the predetermined value of the previously computed error

value. Then, the automatic alarm signal generator 23 fixes a correspondent average error

value as a step size of the adaptive equalizer. Thus, in the present invention, the error value

is reduced by varying the step size. Therefore, the conversion speed of the adaptive filter is

increased compared to a fixed constant step size.

This differs from the disclosed background art in which the step size is a constant

fixed step size (see paragraph [13] and [16], for example). Further, Jeong does not teach or

suggest variably varying the step size of the adaptive equalizer until a current error value is

less then a predetermined value of a previous error value. Rather, Jeong merely teaches

comparing a reference signal and a distortion signal to produce LUT coefficient (see column

6, lines 27-40, for example).

Accordingly, it is respectfully submitted independent claims 1 and 10 and each of the

claims depending therefrom are also allowable.

Further, the specification has been amended to correct a minor informality. No new

matter has been added.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that

the application is in condition for allowance. If the Examiner believes that any additional

changes would place the application in better condition for allowance, the Examiner is

invited to contact the undersigned attorney, **David A. Bilodeau**, at the telephone number

listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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